



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW2037 BYPASS RATIO: 6.0
 UNIQUE ID NUMBER: 1PW039 PRESSURE RATIO (π_{co}): 26.9
 COMBUSTOR:
 ENGINE TYPE: TF RATED THRUST (F_{oo}) (kN): 167.3

REGULATORY DATA **** DATA SUPERSEDED ** SEE FOLLOWING UID FOR REVISED DATA: 4PW072**

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{oo} (g/kN) or SN	4.9	39.3	55.8	14.7
AS % OF ORIGINAL LIMIT	24.8	33.3	59.4	71.4
AS % OF CAEP/2 LIMIT (NO _x)			74.3	
AS % OF CAEP/4 LIMIT (NO _x)			89.9	
AS % OF CAEP/6 LIMIT (NO _x)			102.1	
AS % OF CAEP/8 LIMIT (NO _x)			122.0	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F _{oo})	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	1.538	0.05	0.40	31.10	
CLIMB OUT	85	2.2	1.266	0.06	0.41	24.80	
APPROACH	30	4.0	0.399	0.21	2.30	10.30	
IDLE	7	26.0	0.141	2.26	23.10	4.40	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			547	530	5396	8107	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)				3.2	32.0	48.1	11.4
SIGMA (D _p /F _{oo} in g/kN, or SN)							
RANGE (D _p /F _{oo} in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	100.9
TEMPERATURE (K)	298
ABS HUMIDITY (kg/kg)	

FUEL

SPEC	Jet A
H/C	1.89-1.91
AROM (%)	

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: P&WA
 TEST LOCATION: X-8 Stand, PWA, East Hartford, CT
 TEST DATES: 08/08/1983-10/08/1983

REMARKS

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)